

CHAPTER 18 CHEMICAL WARFARE MATERIEL

18-1. Introduction.

a. This chapter discusses non-stockpile chemical warfare materiel (CWM) as it relates to OE response actions. The OE response process at sites containing non-stockpile CWM typically follows the same procedures as those followed for conventional OE. The following paragraphs highlight areas of the response action process where a different approach is required for non-stockpile CWM sites as compared to conventional OE sites.

b. CWM is defined as an item configured as a munition containing a chemical substance that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. The term CWM includes V- and G- series nerve agent, H- and HN- series blister agent, and lewisite in other-than-munition configurations. Due to their hazards, prevalence, and military-unique application, chemical agent identification sets are also considered CWM. CWM does not include: riot control agents; chemical herbicides; smoke and flame producing items; or soil, water, debris or other media contaminated with chemical agent.

18-2. Responsibilities. OE response actions at non-stockpile CWM sites will be performed in accordance with ER 1110-1-8153. The USACE is responsible for the overall project management and on-site management for non-stockpile CWM projects. Execution of all phases of a non-stockpile CWM project within the USACE is the responsibility of the USAESCH OE Design Center. The specific responsibilities of the HQUSACE, district, MSC, USAESCH OE Design Center, and OE MCX for non-stockpile CWM response actions are presented in ER 1110-1-8153.

18-3. Regulatory Authority.

a. In addition to the regulatory authorities previously cited for conventional OE, there are specific regulations related to non-stockpile CWM. These include:

- (1) AR 385-61, The Army Toxic Chemical Agent Safety Program.
- (2) DA Pam 385-61, Toxic Chemical Agent Safety Hazards.
- (3) AR 50-6, Chemical Surety.
- (4) DA Pam 50-6, Chemical Accident or Incident Response and Assistance Operations.
- (5) DA Pam 40-173, Occupational Health Guidelines for the Evaluation and Control of Occupational Exposure to Mustard Agents H, HD, and HT.

(6) DA Pam 40-8, Occupational Health Guidelines for the Evaluation and Control of Occupational Exposure to Nerve Agents GA, GB, GD, and VX.

b. The probability of encountering CWM during proposed CWM response activities will be ranked in accordance with AR 385-10 into one of five categories prior to initiating on-site activities: frequent, probable, occasional, remote, or improbable.

(1) If the probability is categorized as improbable or remote, the district Commander or designated representative may assume the risk of conducting site activities as a non-CWM site.

(2) If the probability is categorized as occasional, probable, or frequent, the response action must be conducted. Contact the OE MCX for the procedures to be used.

18-4. Coordination. If the presence of CWM is suspected at a site, the district must coordinate with USAESCH prior to beginning any on-site activities.

18-5. Risk Assessment. Any activity on a non-stockpile CWM response project will require determination of risk to the public and site workers. Risks to human health and the environment as a result of an explosion or release of chemical agent are the primary factors in determining the effectiveness of risk management decisions concerning non-stockpile CWM. A site-specific maximum credible event (MCE) will be developed to form a basis to generate hazard zones. Contact the OE MCX for procedures for calculating the MCE. Hazard zones will be computed using the MCE and Army approved atmospheric dispersion modeling. Quantitative RACs will also be developed to assess response hazards (e.g., dispersion of agent-contaminated soil, and explosive hazards). Public risk information and controls will be addressed in safety planning documents.

18-6. Non-stockpile Chemical Warfare Materiel Planned Response Activities.

a. Non-stockpile CWM planned response activities will be conducted to protect public and worker health and the environment in accordance with applicable statutes and implementing regulations. Safety planning and coordination with EPA, state and civil authorities, as appropriate, will be priorities.

b. Prior to initiation of any planned response activities, including site investigation, approved SSHPs and procedures are required. The need for an ARB should also be considered in accordance with the guidance provided in Appendix E.

c. For investigative and assessment activities (e.g., soil and water sampling, geophysical analysis, installation of monitoring wells when anomaly avoidance techniques are used, etc.), SSHPs approved by USAESCH are required. For removal activities (e.g., surface removal of non-stockpile CWM or excavations when the intent is to uncover, characterize, and remove geophysical anomalies), safety submissions must be prepared by the agency with overall project

responsibility and approved by the Office of the Deputy Assistant to the Secretary of the Air Force (ODASAF). Safety submissions will serve as the specifications for conducting work activities at a project. Deviation from the responsibilities, procedures, and controls outlined in a safety submission is not permitted unless approved by the ODASAF.

d. If non-stockpile CWM is encountered during site activities, all other site activities will be stopped and a CWM response action will be initiated. USAESCH is the only USACE command authorized to execute CWM projects, as defined in the glossary and described in ER 1110-1-8153.